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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:

Applicants(s): Curtis G. Wong, *et al.*   Examiner: Raymond J Bayerl

Serial No: 10/055,538   Art Unit: 2173

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Title: MEDIA AUTHORING AND PRESENTATION

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Commissioner for Patents
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REPLY BRIEF

Dear Sir:

     Applicants' representative submits this Reply Brief in response to the Examiner's
Answer dated September 25, 2006.

<div align="center">**REMARKS**</div>

Claims 1, 4-6, 8-10, 15-20, 30-40, 43-47, 52 and 53 are currently pending and are presently under consideration. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments herein. In particular, the following comments address deficiencies contended in the Examiner's Answer to applicants' Appeal Brief.

I.   Rejection of Claims 45-47 Under 35 U.S.C. §101

Claims 45-47 stand rejected under 35 U.S.C. §101. It is respectfully submitted that this rejection is improper and should be reversed for at least the following reasons. The subject claims fall within a statutory class for inventions.

> Patentable subject matter is not limited to tangible articles or objects, but includes intangible subject matter, such as data **or signals**, representative of or constituting physical activity or objects. *In re Warmerdam*, 33 F.3d 1354, 1360, 31 U.S.P.Q.2D (BNA) 1754, 1760 (Fed. Cir. 1994) (citing *In re Schrader*, 22 F.3d 290, 295 (Fed. Cir. 1994) (emphasis added). Section 271(f) refers to "components of a patented invention."... Title 35, section 101, explains that an invention includes "any new and useful process, machine, manufacture or composition of matter."... Without question, ***software code alone qualifies as an invention eligible for patenting under these categories***, at least as processes. *Eolas Techs., Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1338-39 (Fed. Cir. 2005) (emphasis added).

Independent claims 45-47 recite, "*A computer-readable medium having computer executable instructions*". The Examiner argues at page 2 of the Advisory Action (dated July 25, 2005) that one possible embodiment of the computer-readable medium is a "carrier wave" (*e.g.*, a signal), and therefore the claims are non-statutory. At pages 12 and 13 of the Examiner's Answer (hereinafter referred to as "EA"), the application of the cited CAFC cases to the claimed subject matter is not questioned, but rather the holdings of those cases, respectively, are contested. In support, the Examiner contends that the Interim Guidelines forbid the Examiner to regard the instant claims as allowable subject matter because (in the form of a signal under the Examiner's interpretation) it 'does not represent a "machine" or "manufacture" because of its ephemeral nature.'

Foremost, the Interim Guidelines are merely proposals and should not be viewed as overriding settled case law. It is readily apparent that the claims in question produce a useful, concrete and tangible result, and thus satisfy the requirements of 35 U.S.C. §101. Furthermore, the claims are directed toward computer executable instructions, so the fears of claiming an idea itself in the form of a signal (as discussed in the Guidelines) are not at issue in this situation. Moreover, while the Interim Guidelines propose to adopt a position in which signal claims are ineligible for patent protection, the Interim Guidelines itself notes, *"On the other hand, from a technological standpoint, a signal encoded with functional descriptive material is similar to a computer-readable memory encoded with functional descriptive material, in that they both create a functional interrelationship with a computer. In other words, a computer is able to execute the encoded functions, regardless of whether the format is a disk or a signal."* (*See* Interim Guidelines at p. 57).

Finally, the Examiner's argument that the claims are non-statutory (as interpreted in the form of a signal) "because of its ephemeral nature" is improper as well. For example, data (such as computer implemented instructions) stored in memory can be equally ephemeral as data in a signal, but can still be a "machine" or "manufacture" and is statutory nonetheless. (*See In re Lowry*, 32 F.3d 1579, 1583 (Fed. Cir. 1994) (holding that data structures in memory constitute patentable subject matter at least as machines even though they are invisible to the eye); *c.f.*, the Interim Guidelines at p. 57 (text quoted above), wherein it is presumed that *memory* encoded with functional descriptive material is statutory in order to make the counterpoint that *signals* are similar from a technical standpoint).

II.   Rejection of Claims 1, 4-6, 8-10, 43, 44, 52 and 53 Under 35 U.S.C. §102(e)

Claims 1, 4-6, 8-10, 43, 44, 52 and 53 stand rejected under 35 U.S.C. §102(e) as being anticipated by Jain (U.S. 6,567,980, hereinafter referred to as "Jain"). Reversal of this rejection is respectfully requested for at least the following reasons. Jain fails to teach or suggest each and every limitation as recited in the subject claims.

> A single prior art reference anticipates a patent claim only if it expressly or inherently describes ***each and every limitation set forth in the patent claim***. *Trintec Industries, Inc., v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63 U.S.P.Q.2D 1597 (Fed. Cir. 2002); *See*

> *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631,
> 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). ***The***
> ***identical invention must be shown in as complete detail as is***
> ***contained in the … claim***. *Richardson v. Suzuki Motor Co.*, 868
> F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (emphasis
> added).

The claimed subject matter relates to viewing ***annotated*** digital media and non-linear viewing of related *annotated media*. In particular, independent claim 1 (and similarly independent claims 6, 43, and 44) recites, "***a metadata generator*** that produces metadata associated with the selected scene and ***annotates the selected scene with the metadata***; and an organizer that places the selected ***annotated scene*** in a media store to facilitate non-linear viewing of one or more scenes". Jain does not disclose or suggest these novel aspects.

Rather, Jain discloses a multimedia cataloger that ***extracts*** metadata from video (*see* col. 2, lines 18-20), and commits the metadata to the Metadata Track Index Manager and/or a track index (*see* col. 8, lines 54-59; col. 9, lines 11-12). Jain is materially deficient to read upon the claims in at least two ways. (1) Jain does not teach or suggest *a metadata generator that produces metadata …and* ***annotates the selected scene with the metadata***. Jain is entirely void of any teachings of these aspects. (2) Jain does not teach or suggest *an organizer that places the selected* ***annotated scene*** *in a media store*. Although the reference discloses that video can be stored in a content server, this video is not ***annotated*** but exists as it was received by the system.

Despite these evident deficiencies, the Examiner maintains this rejection, which appellants' representative does not believe is maintained with material or good faith support. For example, at page 4 of the EA, it is argued that Jain discloses "a media **cataloging** … application which performs…**indexing**…" (emphasis in original). Appellants' do not dispute that Jain provides a cataloging mechanism that can index video. Rather, appellants' argue that a video cataloging application which performs indexing is materially distinct from *a metadata generator that produces metadata … and* ***annotates the selected scene with the metadata***. In particular, Jain indexes video based upon metadata stored in a metadata server apart from the content server where the actual video is stored. Accordingly, Jain does not annotate the video with metadata, but instead employs metadata from a metadata server to locate the video stored in a content server. Likewise, while Jain can place video in a media store (*e.g.*, content server), such is materially distinct from an organizer that places the selected ***annotated scene*** in a media store.

Accordingly, appellants' representative respectfully requests that this rejection of independent claims 1 and 6, as well as all associated dependent claims, be reversed.

III.   Rejection of Claims 45-47 Under 35 U.S.C. §102(e)

Claims 45-47 stand rejected under 35 U.S.C. §102(e) as being anticipated by Morris (U.S. Patent Application: 2002/0088000). Reversal of this rejection is respectfully requested for at least the following reasons. Morris fails to teach or suggest each and every limitation set forth in the subject claims.

Independent claims 45 and 46 recite, "a second field that stores *a metadata key* that *identifies an annotating metadata associated with the clip* identified by the clip identifier." Independent claim 47 recites, "a second field that *stores a requested user action* ... and a third field that stores metadata...where *the metadata is employed to adapt one or more clips according to the requested user action*." Morris does not disclose or suggest these limitations.

At page 14 of the EA, the Examiner argues to the contrary, and submits that applicants' representative is attempting to have distinctions read in. However, the reverse is true. Applicants' representative is attempting to prevent the Examiner from reading distinctions out of the claims. The claims expressly recites "metadata *key*", which has well-known features, especially in the field of relational databases, as invoked in the specification portion of the disclosure. (*See, e.g.*, p. 21, ll. 1-24).

This type of analysis has occurred repeatedly. For example, as above in §II, when the claims read "annotated scene", the Examiner reads this as simply "scene". In addition, largely any word or term associated with and/or further limiting the word "metadata" has not been considered to have any relevance. Here, "annotating metadata" is read simply as "metadata"; and "metadata key" is read as "metadata" alone. The Examiner rejects reasonably broad interpretations because "they do not appear in the claims" verbatim, but tacitly ignores that his own grounds for rejection (*e.g.*, 'that something in a "packet" will point to "metadata",') does not appear in the claim verbatim either. In fact, any piece of metadata whether in a data store or a packet will have something that points to it. Otherwise, it cannot be accessed/addressed and is useless. Accordingly, interpreting "metadata key" so broadly effectively reduces it to simply "metadata" (since something will always point to it, and thus, any metadata can be read as a metadata key under this interpretation). It is respectfully submitted that an interpretation that

effectively excises certain words or terms is not reasonably broad, especially when, as here, the terms excised are distinguishing features not found in the cited references. Morris discloses metadata. Morris does not disclose a metadata key.

Morris further fails to disclose "*an annotating metadata associated with the clip identified by the clip identifier*", as well as "a second field that *stores a requested user action …* and a third field that stores metadata…where *the metadata is employed to adapt one or more clips according to the requested user action*." The Examiner argues that a user request to retrieve some media constitutes "stores a requested user action" and delivering the requested media stands for "the metadata is employed to adapt the one or more clips according to the requested user action." (*See* EA, pg. 7). A simple transferal of a digital image from point A to point B at the request of a user at point B is materially distinct from *the metadata is employed to adapt one or more clips according to the requested user action*. In particular, to transmit data is materially distinct from "to adapt" data. More particularly, Morris does not disclose or suggest "the metadata is employed to" adapt (or even transmit) the data according to the requested user action. Accordingly, for at least the foregoing reasons, this rejection of independent claims 45-47 should be reversed.

IV.   Rejection of Claims 15-20 and 30-40 Under 35 U.S.C. §103(a)

Claims 15-20 and 30-40 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Jain in view of Duncombe (U.S. 6,792,573). Reversal of this rejection is respectfully requested for at least the following reasons. Jain, alone and/or in combination with Duncombe, does not teach or suggest all limitations set forth in the subject claims.

> To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) *must teach or suggest all the claim limitations*. The teaching or suggestion to make the claimed combination *and the reasonable expectation of success* must be

found in the prior art and not based on the Applicants' disclosure.
See In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The claimed subject matter further relates to annotating digital media with metadata to facilitate non-linear viewing of related scenes that are annotated with metadata. In particular, independent claim 15 (and similarly independent claims 30 and 35) recites, "a scene retriever that retrieves one or more *annotated* scenes" and "a playlist generator that evaluates the one or more *relationships* and produces *a playlist* of related scenes". The Examiner concedes that Jain does not teach or suggest every limitation, but contends that Duncombe will cure the deficiencies.

However, as detailed above, independent claims 15, 30 and 35 recite limitations similar to independent claim 1, which are not disclosed or suggested by Jain. In particular, the instant claims recite *annotated* media (*e.g.*, scenes, video segments, and displayable items). Jain does not annotate media, and Duncombe does not make up for this deficiency. Accordingly, the aforementioned claims as well as all associated dependent claims are therefore believed to be allowable over the cited references.

Moreover, it is readily apparent that the combination of Jain with Duncombe is materially deficient to read upon the subject claims. In particular, since Jain does not disclose a playlist generator (as the Examiner concedes); the reference cannot teach or suggest a playlist generator *that evaluates the one or more relationships* (between the annotating metadata). Duncombe teaches a playlist generator, but not one that *evaluates the one or more relationships* (between metadata). Accordingly, neither reference teaches a playlist generator *that evaluates the one or more relationships* (between metadata), so the Examiner has failed to make a prima facie case for obviousness, and this rejection of independent claims 15, 30, and 35, as well as all claims that depend there from, should be reversed.

Conclusion

For at least the above reasons, the claims currently under consideration are believed to be patentable over the cited references. Accordingly, it is respectfully requested that the rejections of claims 1, 4-10, 15-20, 30-40, 43-47, 52 and 53 be reversed.

If any additional fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP304US].

Respectfully submitted,
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